Fabrice T. P. SAFFRE
Serial No. 10/572,965
December 26, 2008

AMENDMENTS TO THE DRAWINGS:

Applicant submits concurrently herewith nine (9) sheets of annotated drawings illustrating Figs. 1-9 showing proposed changes thereto, accompanied by nine (9) sheets of replacement drawings incorporating the changes shown.

Attachments: Replacement Sheets: 9
             Annotated Sheets Showing Changes: 9

1418986

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

As requested, a more descriptive title has been effected by the above amendment.

As also requested, the specification has been reviewed and amended so as to insert appropriate headings throughout.

Accordingly, all outstanding formal issues are believed to have been resolved in the applicant's favor.

The rejection of claims 1-5 under 35 U.S.C. § 102 as allegedly anticipated by Amalfitano '557 is respectfully traversed.

Independent claims 1 and 5 now incorporate limitations from cancelled dependent claims 2 and 6, respectively. Claims 1 and 5 now also require that usage be measured relative to other users, rather than relative to an absolute criterion (such as Amalfitano teaches in paragraph [0034], where his ranking is dependent on usage relative to an agreed level of service). Claims 1 and 5 now also require that only those users currently connected (i.e., those requesting bandwidth) are allocated any bandwidth at all by the bandwidth control algorithm.

- 14 -

Basis for the amended claims can be found in the specification. For example, at

page 6, lines 28-30, priority is based on an inverse function of the amount of bandwidth

used. Page 6, line 16, specifies that only those users currently connected are sorted

according to their usage data in order to put them in a ranking order. See also, for

example, page 4, lines 20-28, which specify that priorities are compared between current

users, not on the basis of predetermined agreed allowances, and that allocation is a

function of overall demand and availability. This is an important distinction, because it

encourages heavy users of bandwidth to make use of it when overall demand is low,

rather than preventing them from using it altogether.

This differs from Amalfitano where each priority level (to which many users are

allocated) is given a bandwidth to share among those users. No account seems to be

taken in Amalfitano of how many users in that level are actually requiring any

bandwidth. Thus, it would seem in Amalfitano that, if a large proportion of the high

priority users were requiring service, but very few of the low priority users, each low

priority user could be allocated more capacity than each high priority user. Indeed, if no

users in a particular priority level were currently on line, the capacity allocated to that

priority level would be wasted. Compare that with applicant's system in which, at quiet

1418986

times, the few users on line can all be allocated maximum bandwidth (e.g., see the specification at page 7, lines 18-20).

Giving each user a unique ranking is also not disclosed in Amalfitano. New claims 9 and 10 are directed to this feature. This has basis throughout the specification, for example, at page 7, lines 14-18.

Amalfitano compares usage to a predetermined (agreed) level, and demotes users for infractions of that level. Applicant's system relies solely on comparison with other users, and is automatically and periodically adaptable to changes in demand and available capacity.

Given the fundamental distinctions already noted above, it is not believed necessary to discuss additional deficiencies of Amalfitano with respect to other aspects of the rejected claims. Suffice it to note that, as a matter of law, it is impossible for a prior art reference to anticipate a claim unless it teaches each and every feature of that claim.

The rejection of claim 6 under 35 U.S.C. §103 as allegedly being made "obvious" based on Amalfitano in view of Otis '241 is also respectfully traversed.

As the Examiner here recognizes, Amalfitano does <u>not</u> teach measuring means, calculating means or access control means. For these now admitted deficiencies, the Examiner relies upon Otis. However, Otis does not supply the above-noted deficiencies with respect to independent claims 1 and 5 and, thus, even the allegedly "obvious" combination of these references still fails to make out even a *prima facie* case of obviousness under 35 U.S.C. §103.

The rejection of claims 7 and 8 under 35 U.S.C. §103 as allegedly being made "obvious" based on Amalfitano in view of Chuah '416 is also respectfully traversed.

In particular, while Chuah may well teach a modem/server access to the Internet *per se*, it also fails to supply the above-noted deficiencies of a parent claim. Accordingly, it is not necessary at this time to discuss additional deficiencies of this allegedly "obvious" combination of references with respect to other aspects of the rejected claims.

Fabrice T. P. SAFFRE
Serial No. 10/572,965
December 26, 2008

Accordingly, this entire application is now believed to be in allowable condition,

and a formal notice to that effect is earnestly solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____
                Larry S. Nixon
                Reg. No. 25,640

LSN:lef

901 North Glebe Road, 11th Floor
Arlington, VA   22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100
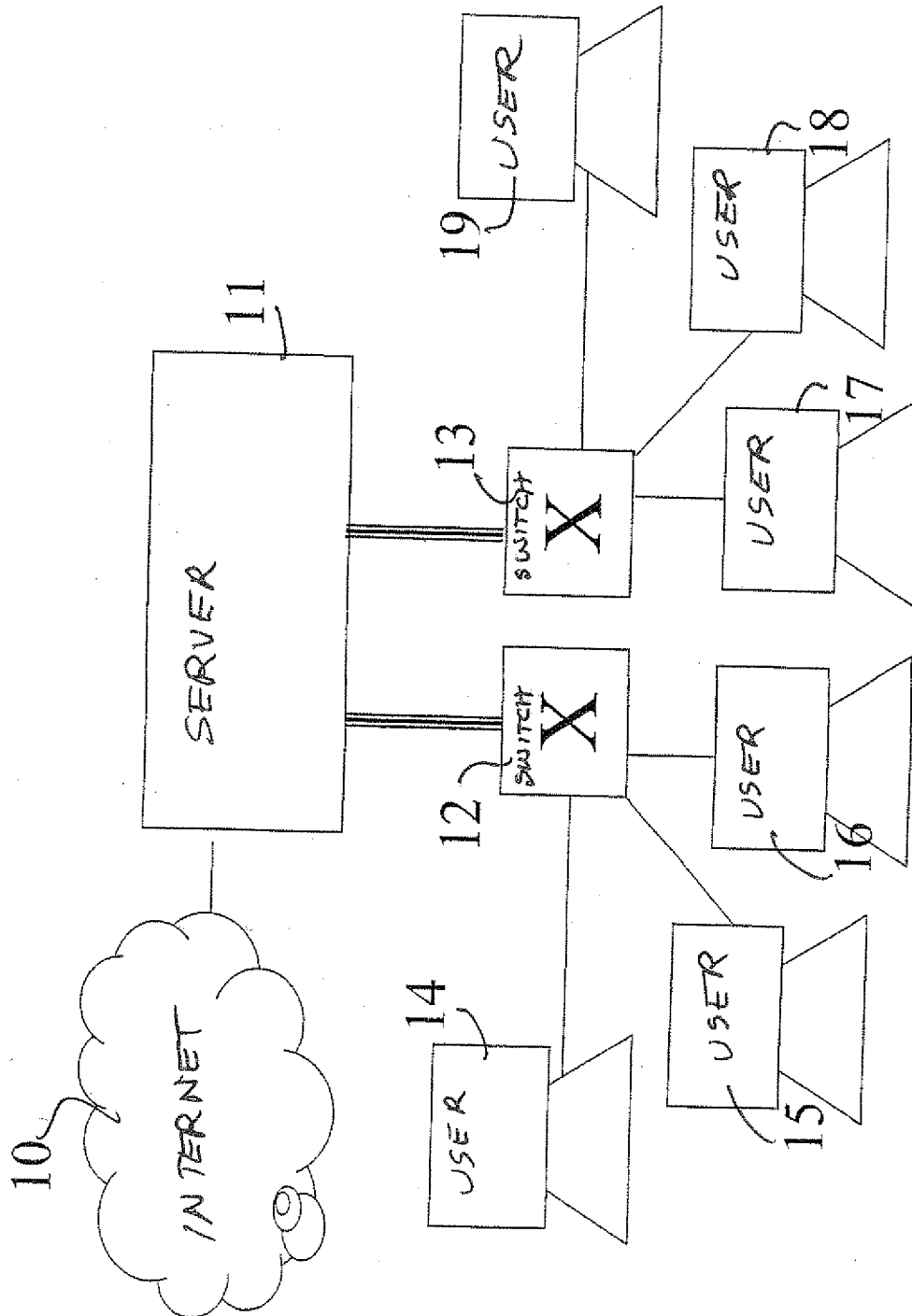
Figure 1

LIMITED CAPACITY POINT

FUNCTIONALITY MODULE 20

26 — rank register

25 — usage store

27 — PROCESSING UNIT CALC

24 — Speed (BANDWIDTH) control UNIT

server

23 — modem

22 — modem

21 — modem

to user terminals

Figure 2

Identify current users — 30

Stored Usage Histories — 31

Rank current users in order of historic usage, $i = 0$ to $N-1$ — 32

B, b_{max}

Calculate α such that $\sum_{i=0}^{N-1}(\alpha^i b_{max}) = B$ — 33

Determine allocations $b_i = \alpha^i b_{max}$ — 34

Instruct modem (i) — 35

Figure 3

Figure 4

Figure 5

Figure 6

Figure 7

Figure 8

Figure 9